

#24

PTO/SB/08A (10-01)

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**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

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Sheet 1 of 3

**Complete if Known**

Application Number	09/974,759
Filing Date	October 9, 2001
First Named Inventor	Stephen D. Rank
Art Unit	2675
Examiner Name	Paul A. Bell
Attorney Docket Number	IMMR003/00US

**U.S. PATENT DOCUMENTS**

Examiner	Cite No. <sup>1</sup>	Document Number Number Kind Code <sup>2</sup> (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
PQB	A1	6,422,941	7/23/2002	Thorner et al.	
PQB	A2	6,160,489	12/12/2000	Perry et al.	
PQB	A3	6,111,577	8/29/2000	Zilles et al.	
PQB	A4	5,690,582	11/25/1997	Ulrich et al.	
PQB	A5	5,575,761	11/19/1996	Hajianpour	
PQB	A6	5,437,607	8/1/1995	Taylor	
PQB	A7	5,436,622	7/25/1995	Gulman et al.	
PQB	A8	5,283,970	2/8/1994	Aigner	
PQB	A9	5,186,695	2/16/1993	Mangseth et al.	
PQB	A10	5,175,459	12/29/1992	Daniel et al.	
PQB	A11	5,165,897	11/24/1992	Johnson	
PQB	A12	5,022,384	6/11/1991	Freels	
PQB	A13	4,885,565	12/5/1989	Embach	
PQB	A14	4,484,191	11/20/1984	Vavra	
PQB	A15	4,464,117	8/7/1984	Foerst	
PQB	A16	4,333,070	6/1/1982	Barnes	
PQB	A17	4,262,549	4/21/1981	Schwelienbach	
PQB	A18	4,127,752	11/28/1978	Lowthorp	
PQB	A19	2,972,140	2/14/1961	Hirsch	

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Examiner Initials <sup>1</sup>	Cite No. <sup>1</sup>	Foreign Patent Document			Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Country Code <sup>3</sup>	Number <sup>4</sup>	Kind Code <sup>5</sup> (if known)			
PQB	B1	JP	H2-185278		7/19/1990	Taito Corporation	
PQB	B2	JP	H4-8361		1/13/1992	Epoch Co. and Key- Planning Co.	
PQB	B3	JP	H7-24147		1/27/1995	Sega Corporation	
PQB	B4	JP	H5-192449		8/3/1993	Taito Corporation	
	B5						

Examiner  
Signature

Paul Bell

Date  
Considered

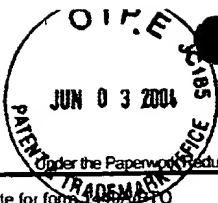
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**INFORMATION DISCLOSURE  
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Sheet 2 of 3

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Application Number	09/974,759
Filing Date	October 9, 2001 JUN 08 2004
First Named Inventor	Stephen D. Rank
Art Unit	2675 Technology Center 2600
Examiner Name	Paul A. Bell
Attorney Docket Number	IMMR003/00US

**OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS**

Examiner Initials *	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.
PAB	C1	PATRICK, "Design, Construction, and Testing of a Fingertip Tactile Display for Interaction with Virtual and Remote Environments," <i>Master of Science Thesis</i> , MIT, Aug. 1990, archived Nov. 8, 1990.
PAB	C2	CALDER, "Design of A Force-Feedback Touch-Introducing Actuator For Teleoperator Robot Control," <i>Bachelor of Science Thesis</i> , MIT, May 1983, archived June 23, 1983.
PAB	C3	WIKER, "Teletouch Display Development: Phase 1 Report," <i>Technical Report</i> 1230, Naval Ocean Systems Center, San Diego, July 1988.
PAB	C4	BLISS, "Optical-to-Tactile Image Conversion for the Blind," <i>IEEE Transactions on Man-Machine Systems</i> , Vol. MMS-11, No. 1, March 1970.
PAB	C5	JOHNSON, "Shape-Memory Alloy Tactile Feedback Actuator," <i>Armstrong Aerospace Medical Research Laboratory</i> , AAMRL-TR-90-039, August, 1990.
PAB	C6	KONTARINIS et al., "Tactile Display of Vibratory Information in Teleoperation and Virtual Environments," <i>PRESENCE</i> , 4(4):387-402, Harvard Univ., 1995.
PAB	C7	AUKSTAKALNIS et al., "Silicon Mirage: The Art and Science of Virtual Reality," ISBN 0-938151-82-7, pp. 129-180, 1992.
PAB	C8	EBERHARDT et al., "Inducing Dynamic Haptic Perception by The Hand: System Description and Some Results," <i>DSC-Vol. 55-1, Dynamic Systems and Control</i> , Volume 1, ASME 1994.
PAB	C9	GOBEL et al., "Tactile Feedback Applied to Computer Mice," <i>International Journal of Human-Computer Interaction</i> , Vol. 7, No. 1, pp. 1-24, 1995.
PAB	C10	PIMENTEL et al., "Virtual Reality: through the new looking glass," 2 <sup>nd</sup> Edition; McGraw-Hill, ISBN 0-07-050167-X, pp. 41-202, 1994.
PAB	C111	"Cyberman Technical Specification," <i>Logitech Cyberman SWIFT Supplement to Logitech Mouse Technical Reference and Programming Guide</i> , 4/5/1994.
PAB	C12	OUHYOUNG et al., "The Development of A Low-Cost Force Feedback Joystick and Its Use in the Virtual Reality Environment," <i>Proceedings of the Third Pacific Conference on Computer Graphics and Applications, Pacific Graphics '95</i> , Seoul, Korea, 21-24 August 1995.
PAB	C13	KACZMAREK et al., "Tactile Displays," <i>Virtual Environment Technologies</i> , Chap. 9, pp. 349-414.
PAB	C14	LAKE, "Cyberman from Logitech," at <a href="http://www.ibiblio.org/GameBytes/issue21/greviews/cyberman.html">http://www.ibiblio.org/GameBytes/issue21/greviews/cyberman.html</a> , 1994.
PAB	C15	"Component Maintenance Manual With Illustrated Parts List, Coaxial Control Shaker Part No. C-25502," Safe Flight Instrument Corporation, Revised 28 January 2002 (3 pages).

Examiner  
Signature

Paul Bell

Date  
Considered

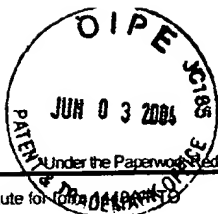
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**INFORMATION DISCLOSURE  
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Sheet 3 of 3

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Filing Date	October 9, 2001
First Named Inventor	Stephen D. Rank
Art Unit	2675
Examiner Name	Paul A. Bell
Attorney Docket Number	IMMR003/00US

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PAB	C16	"Technical Manual Overhaul Instructions With Parts Breakdown, Coaxial Control Shaker Part No. C-25502," Safe Flight Instrument Corporation, Revised 15 July 1980 (23 pages).
PAB	C17	SCANNELL, "Taking a Joystick Ride," <i>Computer Currents</i> , Boston Edition, Vol. 9, No. 11, November 1994
PAB	C18	YAMAKITA et al., "Tele-Virtual Reality of Dynamic Mechanical Model," <i>Proceedings of the 1992 IEEE/RSJ International Conference on Intelligent Robots and Systems</i> , Raleigh, NC, July 7-10, 1992
PAB	C19	NOLL, "Man-Machine Tactile," <i>SID Journal</i> , July/August 1972 Issue.
PAB	C20	ROSENBERG, "Virtual Fixtures: Perceptual Overlays Enhance Operator Performance in Telepresence Tasks," <i>Ph.D. Dissertation</i> , Stanford University, June 1994.

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Examiner Signature	Paul Bell	Date Considered	12/4/2004
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